HEALTH PATHWAYS

Volume 24, No. 17

"Created For Students, By Students!"

October 2001

This issue of *Health Pathways* is filled with Postbaccalaureate and Summer Enrichment Program information from some of the nation's most prestigious colleges and universities. These programs provide students with the opportunity to increase their chances for entry into medical, dental, or other health professional schools. Programs usually consist of intensive introductory courses in math and the basic sciences, and are de-

2002 Postbaccalaureate and Summer Enrichment Programs

signed to improve student knowledge in these areas and prepare the student for graduate work. In this issue, you will find a detailed description of each program including: eligibility requirements, duration of program, deadline to submit application, and whom to contact for more information.

If you are seeking a program that will help you prepare for a career in the health services, or are looking for a way to supplement your education and possibly increase your chances of getting into graduate school, then this issue of *Health Pathways* is just what the doctor ordered.

California Postbaccalaureate Programs

California State University, Dominguez Hills

Postbaccalaureate Program

Description: For students who need to complete premedical undergraduate



science courses in preparation for application to professional schools. Eligibility: Students with a BS/BA and above a 2.5 GPA. Duration: One to three years.

Deadline: June 1 for fall admission **Contact:**

(310) 243-3388, or (310) 243-3376 e-mail: jlyle@csudh.edu James Lyle Department of Chemistry CSU, Dominguez Hills

Carson, CA 90747

California State University, Fullerton

Health Professions Postbaccalaureate Advising

Description: Offers premedical and pre-health professions prerequisites plus additional science courses. Research experience available on campus; mock interviews; evaluation of MCAT or DAT scores. No degree or certificate given, and no alliance with any specific medical school. Evaluation process conducted.

Eligibility: Enrolled at CSUF.

Duration: Contingent upon courses needed. No formal program.

Deadline: Rolling admissions

Contact: (714) 278-3980

David B. Drath, PhD

CSU, Fullerton

c/o Health Professions Office LH203

800 N. State College Blvd.

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Fullerton, CA 92834

www.oshpd.state.ca.us/pcrcd/professions/hpcop.htm

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We welcome contributions. Mail us your ideas, letters, announcements, or stories today! Announcements of scheduled events must be mailed to our editorial office four months in advance to be published. Be sure to include your name, address, and phone number on all correspondence. The *Health Pathways* editorial staff reserves the right to edit all material.

REPRINTED ARTICLES

Views of contributing writers do not necessarily reflect the policy of the department, agency, or administration. Letters to the editor are encouraged. We do not pay for guest articles. Manuscripts are welcome. The *Health Pathways* editorial staff reserves the right to edit all material.

EDITORIAL AND BUSINESS OFFICE

Health Professions Career

Opportunity Program

Health Pathways Newsletter
1600 Ninth Street, Rm. 441
Sacramento, CA 95814

Tel: (916) 654-1730 Fax: (916) 654-3138

e-mail: kmunster@oshpd.state.ca.us HPCOP Web site: www.oshpd.state.ca.us/pcrcd/

professions/hpcop.htm

California State University, Hayward

Postbaccalaureate Program

Description: A postbaccalaureate program for students interested in the health professions. Program contents and duration dependent on student's background and needs.

Eligibility: Open to all students. **Duration:** One and a half to two years.

Deadline: None, apply within the University.

Contact: (510) 885-2366 fax: (510) 885-4747

e-mail: jdragolo@csuhayward.edu

Dr. Julia Dragolovich CSU, Hayward

Department of Biological Sciences

Hayward, CA 94542

Loyola Marymount University

Postbaccalaureate Program

Description: Open to students who lack basic prerequisites to premedical requirements. Most undergraduate courses are offered in the daytime only, on a space-available basis. Students have to apply through admissions as a non-degree student and may take a maximum of 18 semester hours. This is not an organized program.

Eligibility: Students with a bachelor's degree and a minimum 3.4 GPA.

Duration: Regular semester.

Deadline: Apply within University. **Contact:** (310) 338-5954

Dr. Anthony P. Smulders, Director Health Professions Information

Program

Loyola Marymount University 7900 Loyola Blvd.

Los Angeles, CA 90045-8220

Mills College

Postbaccalaureate Premed Program

Description: General biology, general chemistry, calculus, organic chemistry, and physics. Other courses optional. Federal loans (Stafford and SLS) and a limited number of assistantships awarded to second year students. Oncampus excellent success rate, individual attention from faculty.

Eligibility: Non-science baccalaureate degree from an accredited college or university. Generally, applicants have at

least a 3.2 GPA overall. Students may not retake any previously taken science courses. Three letters of recommendation, essay, official transcripts confirming baccalaureate degree, and official GRE general test, SAT, or ACT scores required.

Duration: One to two years. **Deadline:** February 1, 2002 **Contact:** (510) 430-3309 fax: (510) 430-2159

e-mail: Grad-studies@mills.edu

Office of Graduate Studies

Mills College

500 Mac Arthur Blvd. Oakland, CA 94613

San Jose State University

Biological Sciences

Description: Actively encourages students who are changing career directions to enroll as undergraduates for a second bachelor's degree, via standard university admissions procedures. Special advising is provided, including intense personalized assistance in satisfying premedical requirements. Fees are approximately \$1,000 per semester.

Duration: Those with technical backgrounds (e.g. engineers) prepare for the MCAT in one year, while those without college chemistry take two years to prepare for the MCAT.

Deadline: Inquire within the University.

sity.

Contact: (408) 924-2429 Dr. Sally Veregge San Jose State University Biological Sciences San Jose, CA 95192-0100 www.sjsu.edu/depts/Biology

Scripps College

Postbaccalaureate Premedical Program

Description: Program provides individuals with the opportunity to pursue a career in health care by offering an intensive curriculum of premedical courses. The small program admits 10-14 students per year and currently has an acceptance rate to medical and veterinary school of 91%. They also have three medical

school linkage programs (George Washington University in Washington D.C.; Temple University in Philadelphia, Pennsylvania; and Western University of Health Sciences, College of Osteopathic Medicine in Pomona, California), which allows students early admission to these medical schools. The early decision programs are limited and are only made available to students with superior qualifications.

Eligibility: Available to both women and men who have a bachelor's degree in a non-science area with a 3.0 GPA or above; applicants must have taken either an SAT, ACT, or a GRE exam and official scores are required for each applicant. Applicants should possess a strong motivation toward a career in health care as evidenced by volunteer or paid work experience in a health care or social service setting.

Duration: 12-15 months. **Deadline:** March 1, 2002 **Contact:** (909) 621-8764 fax: (909) 621-8558

e-mail: Jolson@Scripps.edu

Ms. Jodi Olson Administrative Director W.M. Keck Science Center Postbaccalaureate Premedical Program Scripps College 925 N. Mills Avenue Claremont, CA 91711

Sonoma State University Postbaccalaureate Health Professions

Advising Program

Description: Provides the required science courses necessary for admission to doctoral level health professions schools. In addition, the Health Professions Advisory Committee advises students, conducts mock interviews, and prepares a committee letter of evaluation.

Eligibility: Must have a BA/BS

degree.

Duration: Two years.

Deadline: November 1 - January 31 for Fall; August 1-October 31 for Spring. Apply as a second BS under-

graduate in chemistry. **Contact:** (707) 664-2334 or

(707) 664-2331

e-mail: Vin.Hoagland@sonoma.edu
Dr. Vincent Hoagland, Chair
Health Professions Advisory
Committee

Department of Chemistry Sonoma State University 1801 E. Cotati Ave Rohnert Park, CA 94928



University of California, Davis Postbaccalaureate Re-applicant Program

Description: Stresses fundamental studying/testing skills during summer component; followed by three quarters of rigorous upper division science courses individually selected for postbaccalaureate students. All living and academic costs are covered during summer component; it is the student's responsibility to make financial aid arrangements for the academic school year through the Undergraduate Financial Aid Office at UC Davis.

Eligibility: Be considered a socioeconomically disadvantaged student and/or show evidence of returning to medically underserved community; completion of an undergraduate degree (or higher) from an accredited U.S. college or university; must be a legal resident of California; prior rejection (via AMCAS application) from an AAMC affiliated medical school; prefer minimum MCAT average of 6.0. Some requirements may be waived depending on individual circumstances.

Duration: Entering summer (nine weeks) plus three academic quarters – total of one year.

Deadline: April 30, 2002 (Inquire for applications in November 2001) **Contact:** (530) 752-8119

Director of Admissions and Outreach Postbaccalaureate Program

Office of Medical Education

UC Davis

School of Medicine Davis, CA 95616

University of California, Irvine

Postbaccalaureate Program

Description: Phase I: An intensive MCAT review course. Phase II: Enrollment in full-time upper division science courses to enhance GPA.

Eligibility: Designed for socioeconomic or financially disadvantaged students who are reapplying to medical school. Possess a BA/BS degree and have fulfilled all premedical requirements.

Duration: One year. **Deadline:** April 15, 2002 **Contact:** (949) 824-8930 or

1-800-824-5388

Eileen Munoz, Program Coordinator

UC, Irvine

Admissions & Outreach

PO Box 4089

Irvine, CA 92697-4089

University of California, Los Angeles School of Medicine

Re-applicant Program (UCLA RAP)

Description: A comprehensive, structured postbaccalaureate program to assist students from disadvantaged backgrounds who have been unsuccessful in gaining admission to any U.S. medical school. An intensive eightweek summer session focuses on MCAT preparation. Distinguished guest lecturers provide seminars and workshops covering academic skills; extensive reviews of biology, chemistry and physics; self-development; time management; financial planning; medical school re-application, and interviewing skills. An individualized academic year program that consists of a science curriculum follows. Participants, consult with program advisors, and select courses through UCLA Extension or a local California State University.

Eligibility: Students must have been previously unsuccessful in gaining admission to any U.S. medical school, be considered disadvantaged or from an underserved community, have completed an undergraduate degree or higher from an accredited U.S. college or university; be a U.S. citizen or permanent resident; have a minimum GPA of 2.7 or higher, and have a minimum combined MCAT score of 15.

Duration: Eleven months—Two sessions.

Session #1: June 25-Aug. 18, 2002. Session #2: during the 2002-2003

academic year.

Deadline: Rolling basis. Will be reviewed through June 30, 2002.

Contact: (310) 825-3575 Elizabeth Guerrero, MPH Director, UCLA RAP

Office of Academic Enrichment and

Outreach 13-154 CHS Box 956990

UCLA School of Medicine Los Angeles, CA 90095-6990 www.medstudent.ucla.edu/osss

University of California, San Diego School of Medicine Re-applicant Summer Course (RSC)

Phase I Postbaccalaureate program

Description: Students also participate in fall component, enrolling in UCSD science courses. Extensive mock interviews videotaped with UCSD School of Medicine Admissions

Committee members, intensive MCAT preparation, counseling, reapplicant strategies, and learning skills specialists. Special health-issues workshops.

Eligibility (for RSC and Postbac): Economically/educationally disadvantaged student; California resident and U.S. citizen or permanent resident. Bachelor's degree; already applied to medical school and received interview; taken MCAT; completed one year chemistry, organic chemistry, physics, biology, and math; minimum 2.7 science GPA; and proven commitment to serve health care needs of

Stipend and housing for eight weeks.

Duration: Eight weeks. **Deadline:** June 1, 2002

underserved communities.

Phase II Postbaccalaureate Program

Description: Extension of Reapplicant
Summer Course, enrollment at UCSD
for academic year is Phase II of the
Postbaccalaureate Program. Undergraduate science courses (primarily
upper division) to strengthen science
profile. Course tutoring and reading
and writing skills specialists available.
Clinical skills. Opportunity to partici-

pate in research projects and volunteer clinics. Special workshops and counseling. Participants must secure own housing. The student will be required to reside in San Diego for program duration.

Duration: Nine months. **Contact:** (858) 534-4170 Saundra Kirk, MS, Director

HCOP Student Outreach UCSD, School of Medicine Date Building, Room 105 9500 Gillman Dr. #0655 La Jolla, CA 92093-0655



University of California, San Francisco School of Medicine

Postbaccalaureate Re-applicant Program

Description: Designed to help individuals increase their chances of gaining admission to medical school by offering intensive MCAT review, assistance with medical school application, science courses, seminars on health care issues in underserved communities, and individual counseling. Workshop to enhance skills in critical thinking, verbal reasoning, time management, and stress management techniques. A modest stipend will be offered to each participant in the summer to assist with meals and incidental expenses.

Eligibility: Have a 2.93 GPA or higher, minimum combined MCAT score of 15 (minimum of five on each section); be a legal resident of California; have completed an undergraduate degree or higher from an accredited U.S. college or university; have been previously unsuccessful in gaining admission to medical school in the U.S.; and be considered disadvantaged.

Duration: 11 months. **Contact:** (415) 476-5348

Postbaccalaureate Re-applicant

Program

UCSF School of Medicine

Office of Extramural Academic Programs
1855 Folsom St., Box 0409

San Francisco, CA 94143-0409

University of California, San Francisco School of Dentistry

Postbaccalaureate Program **Description**: Program provides students assistance with gaining acceptance into dental schools by enrolling them in a rigorous summer and fall curriculum, focusing on preparing for the Dental Admission Test (DAT) and upper division science courses. Students will also enhance their test taking skills and develop learning strategies by participation in specially designed seminars and workshops. Students will also observe and participate in the UCSF School of Dentistry's programs and clinics. Eligibility: Completion of an undergraduate degree from an accredited college or university; legal resident of California: minimum 2.6 (overall) and 2.4 science GPA; minimum DAT scores of 14 (PAT/ACD); documented evidence of academically or economically disadvantaged backgrounds; demonstrated interest in working with underserved communities or in communities with limited access to oral health care; preference will be

Duration: Entering summer (eight weeks) plus three academic quarters or two semesters.

given to students who were granted an

interview by a dental school. The

to participants.

program covers the cost of summer

housing and provides a small stipend

Deadline: Rolling basis. Applications will be reviewed until all 15 spots are filled.

Contact (415) 476-2712 Dr. Harvey Brody Associate Director UCSF School of Dentistry, Postbaccalaureate Program Box 0430 San Francisco, CA 94143

Out-of-State Postbaccalaureate Programs

Agnes Scott College

Postbaccalaureate
Premedical Program

Description: Designed for women who have completed a baccalaureate degree in a field other than science at a regionally accredited college or university. Minimum of a 2.8 undergraduate grade point average required for admittance into program. Previous experience in a medical setting, either as a volunteer or professional is desired. Students are subject to all regulations in the current Agnes Scott College Catalog. Students can earn a certificate upon completion of minimum 32 hours of laboratory science and a non-credit co-curricular seminar on various health-related topics. Resident hall housing is not available for postbaccalaureate students. Some college housing may be available on a limited basis for rental. Contact college for specific fees and requirements.

Eligibility: Open to all students who meet requirements.

Deadline: April 1, 2002
Contact: (404) 471-6361
fax: (404) 471-6083
Lerita Coleman Brown
Associate Dean of the College/
Professor of Psychology
Agnes Scott College
Office of the Dean of College
141 East College Avenue

Armstrong Atlantic State College

Atlanta/Decatur, GA 30030-3797

Postbaccalaureate Program

Description: Allows students many options to meet their needs and interests. Students may take undergraduate courses to complete premedical requirements, review course materials as preparation for the Medical College Admission Test (MCAT), complete a second undergraduate degree, or for general interest. Students may engage in medical internships and/or do volunteer work to gain experience in medical

fields. One option will allow qualified students to take graduate courses with the possibility of working toward a master's degree in public health or health care administration. Standard financial aid is available.

Eligibility: Students who lack prerequisites basic to medicine.

Duration: Depends on the needs and interests of the individual student. **Deadline:** Students may apply at any time consistent with the university application procedures and start at the beginning of any semester.

Contact: (912) 927-5279

Henry E. Harris

Armstrong Atlantic State College College of Arts and Sciences Savannah, GA 31419-1997

Assumption College

Postbaccalaureate Certificate

Program

Description: Postbaccalaureate certificate undergraduate course preparation for professional schools in health fields.

Eligibility: Students who have not majored in one of the natural sciences.

Contact: (508) 767-7293

Allan Barnitt Assumption College Division of Natural Sciences Worcester, MA 01615-000

Avila College

Postbaccalaureate Premedical Program

Description: Designed to prepare students with a minimal science background to apply to medical school.

Eligibility: Bachelor's degree and a

minimum 3.0 GPA.

Duration: Two years or less. **Deadline:** June 3, 2002 **Contact:** (816) 501-3655

e-mail: sullivancl@mail.avila.edu Dr. C. Larry Sullivan, Chairperson

Avila College

Department of Natural and Allied Health Sciences and Mathematics 11901 Wornall Road

Kansas City, MO 64145

Bryn Mawr

Postbaccalaureate Premedical Program

Description: Full-time work, undergraduate sciences. Provisional early school admissions option for well-prepared students. Limited scholarships. Strong advising; excellent medical school acceptance rates.

Eligibility: Career change; bachelor's degree; neither previously applied to medical school nor taken premed courses, minimum 3.0 GPA.

Duration: One academic year, one to

two summers.

Deadline: Rolling admissions; final deadline; June 1 of application year.

Contact: (610) 526-7350

Jodi Bergman Domsky, Asst. Dean Health Professions Advising Office

Bryn Mawr College 101 North Merion Ave. Bryn Mawr, PA 19010

www.brynmawr.edu/admins/postbac

Columbia University

Postbaccalaureate Premedical Program

Description: Program seeks to attract students who did not prepare for medical school as undergraduates or for careers in veterinary medicine, dentistry, physical therapy, osteopathic medicine, and physician assisting. Financial aid is available from student loans and private bankers; some money provided by the university. An active student premedical association sponsors support programs and social activities. Admission linkage agreements with seven medical schools: Brown, SUNY/Stony Brook, Trinity/Dublin, Brooklyn, MCP/Hahnemann, Temple, and Jefferson.

Eligibility: Bachelor's degree, minimum 3.0 GPA, and a record of academic accomplishment.

Duration: Two years full-time or

flexible part-time start. **Deadline:** Rolling admissions **Contact:** (212) 854-2772

Thea L. Volpe, PhD, Director

Postbaccalaureate Premedical Program

Columbia University 2970 Broadway, MC 4101 New York, NY 10027

www.columbia.edu/cu/gs/postbacc

Duquesne University

Postbaccalaureate Premedical Program

Description: Designed for both students with a non-science background (career changers) and those with a science background (enhancement program). The curriculum is individually designed based upon the student's academic background. Linkage agreements exist with Temple University School of Medicine, and the Lake Erie College of Osteopathic Medicine. The linkage agreements allow students to matriculate into medical school a year earlier than normal by omitting the "glide year." Eligibility: Minimum 3.0 GPA; 1100 SAT score, or 26 ACT score; two faculty letters of recommendation:

Duration: One to two years, based on student's academic history and performance within the program.

personal statement; and interview at

Deadline: October 15, 2001 for Spring admission; April 30, 2002 for Fall.

Contact: (412) 396-6335 fax: (412) 396-5587 Kenneth Boyd, PhD, Director

Duquesne University.

e-mail: boyd@duq.edu

Catherine Dvorak, Assistant Director e-mail: dvorak@duq.edu

Duquesne University Postbaccalaureate Premedical Program B101 Bayer Learning Center Pittsburgh, PA 15282-0300

Goucher College

Postbaccalaureate Premedical Program

Description: Full-time, one-year program in undergraduate premedical sciences. Curriculum includes two semesters each of general chemistry, physics, organic chemistry, and biology. Designed for non-science majors. Financial aid is available. Eligibility: Bachelor's degree, never previously applied to medical school, or taken the MCAT. Competitive undergraduate record. SAT or GRE scores, two letters of recommendation, personal statement.

Duration: One full calendar year. **Deadline:** Rolling admissions **Contact:** (800) 414-3437

Liza Thompson Program Director

Postbaccalaureate Premedical Program

Goucher College

1021 Dulaney Valley Road Baltimore, MD 21204-2794

Harvard Medical School

Visiting Clerkship Program

Description:

To increase the medical student's awareness of opportunities in academic medicine, consideration of academic training programs for internship and



residency and to especially increase the number of under represented minority students applying to Harvard Medical School-affiliated hospital training programs.

Eligibility: Enrolls fourth-year medical students, particularly African-American, Native American/Alaska Native and Hispanic American students attending accredited U.S. medical schools and in good standing. Students in the last quarter of their third year, who have completed core clerkships in medicine, surgery, pediatrics and obstetrics are also eligible.

Duration: Four weeks
Deadline: Rolling Admission
Contact: (617) 432-4422
Jeanette Catherwood
Project Coordinator
Visiting Clerkship Program
Harvard Medical School
164 Longwood Avenue, 2nd Floor
Boston, MA 02115
e-mail:
jeanette catherwood@hms.harvard.edu

Harvard University Extension School

Health Careers Program

Description: Pursuit of

postbaccalaureate premedical requirements in supportive setting.

Eligibility: Application with \$100 fee and transcripts. Applicant sponsorship

based on grades in program. **Duration:** Two years, part-time. **Deadline:** Rolling admissions **Contact:** (617) 495-2926

Dr. William Fixsen or Owen Peterson

Health Careers Program

Harvard University Extension School

51 Brattle Street Cambridge, MA 02138

Immaculata College Postbaccalaureate Program

Description: Offers a nondegree program of study for highly capable college graduates who wish to prepare for application to medical school or to graduate programs in allied health fields. Program is designed for students who did not complete courses required for admission to medical schools or to graduate programs in allied health fields.

Duration: One to two years. **Contact:** (610) 647-4400, ext.3273 e-mail: scronin@immaculata.edu Dr. Susan Cronin, IHM, PhD. Immaculata College

Box 650

Immaculata, PA 19345

New York University

Postbaccalaureate Program

Description: Designed for students with non-science backgrounds interested in pursuing a career in medicine. Part-time; no degree; on-campus housing not encouraged; not remedial or designed to enhance records for undergraduate. Minimum four-course completion for medical school letter of recommendation from NYU. Extensive evaluation process.

Eligibility: 3.0 minimum GPA. Bachelor's degree from accredited school or foreign equivalent. Transcripts, statement of purpose explaining reasons for career change, and other motivating factors.

(continued on page 10)

Planning for California's Health Care Future

Health Careers Training Program Insert

July 2001

The well kept secret

Solving the Laboratory Personnel Shortage

There is a definite need for a cohesive academic infrastructure that couples with industry to provide educated and trained personnel to perform clinical laboratory testing. In fact, the nation needs such a foundation to

pass a licensing examination approved by the California Department of Health Services before practicing as clinical laboratory scientists (CLS) in this state.

The California Association for

Medical Laboratory Technology (CAMLT), a nonprofit, professional organization, began an outreach program in January of this year to form a consortium to address the shortage of laboratory personnel. CAMLT has taken a multi-pronged approach to stabilizing and providing steady state entry into the laboratory occupations as needs arise. Areas included in the strategy are educa-

tion, training, legislative advocacy, public awareness, networking of resources, "return to community" programs, and integration with the regulatory process. The CAMLT outreach effort began with statewide community meetings that were well attended. A core consortium working group was formed from participants in the

- There will be an estimated nine to ten thousand vacancies in laboratory personnel in the State of California over the next seven years.
- California only gains approximately 200 licensed lab techs per year.
- Recognition of the shortage outside the profession has been virtually nonexistent.

community meetings. The core group includes representatives from three California State University campuses, a community college **Regional Health Occupations** Resource Center, the Department of Health and Human Services. Hospital Council of Northern and Central California, the Engineers and Scientists of California, the California Department of Health Laboratory Fields Services, and some regional laboratory managers.

Above: Two lab technicians supervise a patient during a routine test.

fill the near 100,000 positions expected to become available by the year 2008. The California share of that shortage is estimated to be nine or ten thousand vacancies for laboratory personnel for the same time frame. California currently acquires about 200 newly licensed laboratorians per year. Only about 50 of those are California educated and trained. All must

(see **Shortage** on page 9)

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www.oshpd.state.ca.us/pcrcd/professions/hctp.htm

H C T I

As part of the Health Careers Training Program's attempt to provide you with information regarding allied health occupations, each issue will focus on at least one allied health profession, and will include specific information regarding: job duties, working conditions, employment trends, salaries, entrance requirements, and advancement opportunities.

Clinical Laboratory Scientists

THE JOB

Clinical laboratory scientists, also known as medical technologists, are licensed health care professionals who perform laboratory analysis on specimens collected from patients.

Clinical laboratory science is where basic laboratory science meets the practice of medicine. Practitioners are educated. skilled individuals who primarily perform clinical laboratory tests on patient samples such as blood, urine, and other body fluids. This testing is a critical part of health care as the results obtained by the laboratory tests are a vital and fundamental tool for physicians in their diagnosis, treatment, and prevention of disease. Successful clinical laboratory scientists (CLS) are individuals who enjoy studying the biological, chemical, and physical sciences and applying scientific methods to the diagnosis and evaluation of disease.

Clinical laboratory scientists perform a wide range of laboratory tests, from matching donor blood with the blood of a patient who needs a transfusion, or matching organs for transplant, to identifying abnormal cells in leukemias and cancers or finding the cause of a bleeding disorder. CLS's screen specimens for drugs and genetic anomalies. They also test for pregnancy and paternity. CLS's function as generalists or as specialists in

disciplines such as hematology, blood banking, chemistry, toxicology, microbiology, immunology, molecular biology, parasitology, and virology.

Clinical laboratory scientists work in a variety of settings. Those sites include hospital and research laboratories, large reference laboratories and small physician's office laboratories, public health laboratories, veterinary laboratories, food laboratories, biotech laboratories, forensic, and pharmaceutical laboratories to name a few. In many settings, they perform thousands of different tests in high pressure environments using appropriate methodologies and high standards of quality to obtain accurate, reliable results that may mean the difference between life and death.

Clinical laboratory scientists are educated and trained to be involved in every step of clinical laboratory testing. The CLS can draw blood, process specimens, and assist physicians in interpreting results in addition to actually performing the testing. However, especially in large laboratory settings, other personnel assist in collection and processing as well as some limited testing. Those other personnel include phlebotomists, laboratory assistants, and potentially, medical laboratory technologists (MLT). MLT's are not yet included as licensed, testing personnel in California, but the

category is under consideration by the California Department of Health Services.

EMPLOYMENT OUTLOOK

Shortages similar to those facing the nursing profession, also challenge laboratory personnel. The National Bureau of Labor and Statistics projects national shortfalls of 93,000 laboratory workers by the year 2008. This includes 53,000 new jobs and 40,000 vacancies due to retirement or leaving the profession for other reasons. The California portion of that shortage is expected to be between five and ten thousand positions for the same time period.

Many facilities have positions they are unable to fill and hiring bonuses are being offered across the country.

The growing patient base, due to population aging, affects the laboratory professions just as it does other healthcare professions.

WAGES, HOURS AND FRINGE BENEFITS

Wages for clinical laboratory scientists in California vary by geographical region. Wages are slightly higher in some areas and under some union agreements. Wages vary somewhat by facility, also. Laboratory testing is conducted 24 hours a day, seven days

a week, 365 days of the year in many facilities and the laboratories are staffed accordingly. The day is usually divided into three shifts. Most facilities require coverage of weekends and holidays. Full-time and part- time positions are available.

Fringe benefits often include paid vacation and holidays, sick leave, and health and dental insurance.

ENTRANCE AND TRAINING REQUIREMENTS

Licensed clinical laboratory scientists have, at minimum, baccalaureate degrees that include significant course work in chemistry and the biological sciences. Most have additional course work in virology, parasitology, anatomy, and physics.

In order to become a licensed clinical laboratory scientist, the individual must complete a training program in a California Department of Health Services approved clinical laboratory and pass the State of California licensure examination. The training programs are generally 12 months in length. Many students also sit for one or more national certifying examinations which qualifies them to work in states other than California.

ADVANCEMENT

Representative career choices for students passing the clinical laboratory scientist licensing examination include clinical and hospital laboratories, medical diagnostic laboratories, pharmaceutical laboratories, veterinary laboratories, food science settings, medical research, biotechnology, molecular biology, laboratory management, technical support and sales of medical equipment and diagnostic instrumentation, public health, teaching, and graduate or medical school. Clinical laboratory scientists often move up through the management ranks or make alternative career choices that rely on the knowledge and skills gathered in becoming and working as a clinical laboratory scientist.

FINDING THE JOB

Employers recruit primarily through human resource listings at individual facilities. Classified advertisements in newspapers, in scientific and medical journals, and on Web sites is common. The CAMLT Web site (www.camlt.org) lists many statewide professional opportunities

(**Shortage** from page 7)

The overall goal of CAMLT's Personnel Shortage Initiative is to help design and support the infrastructure that will bring new blood to the laboratory professions and will keep qualified people in those professions. The intent is to set up a model program that interfaces undergraduate and postgraduate education and training with industry needs. Essential components of the outreach program are recruitment beginning at the K-12 level, targeting of untapped diversity pools, and the return of educated and trained personnel to communities in need.

also.

Source: Jane Bruner, President of the California Association for Medical Laboratory Technology. 1895 Mowry Ave. Ste. 112, Fremont, CA 94538.E-mail: bruner@science.csustan.edu.

STATE OF CALIFORNIA

Governor Gray Davis

CALIFORNIA HEALTH AND HUMAN SERVICES AGENCY

Secretary

Grantland Johnson

O FFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

Director

David M. Carlisle, M.D., Ph.D.

HEALTH CARE WORKFORCE AND
COMMUNITY DEVELOPMENT DIVISION
Acting Deputy Director
Brian Desmarais, M.P.A., R.N.

HEALTH CAREERS TRAINING PROGRAM

Lead Project Coordinator

B. Glen Varner Phone: (916) 653-0283

e-mail: bvarner@oshpd.state.ca.us

Project Coordinator Garth Fryer Ph: (916) 654-1247

e-mail: gfyer@oshpd.state.ca.us

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Project Coordinator Anita McDaniel Phone: (916) 654-2888

e-mail: amcdanie@oshpd.state.ca.us

Student Assistant Ryan Nagle

Phone: (916) 654-2754

e-mail: magle@oshpd.state.ca.us

Health Care Workforce and Community Development Division Health Careers Training Project 1600 Ninth St., Room 440 Sacramento, CA 95814

Fax: (916) 654-3138

The Health Careers Training Project insert is published four times a year as part of the *Health Pathways* Newsletter. HCTP is designed to help promote both public and private-sector collaborates that identify and develop health career training resources, funding resources and jobs for the unemployed, targeted layoffs, and dislocated workers. These partnership efforts help meet today's workforce demands of California's healthcare industry.

Editor: Andrea Alvarez

(continued from page 6)

Duration: One to two years.

Deadline: December 1, 2001, for Spring; May 1, 2002, for Summer; August 1, 2002, for Fall

Contact: (212) 998-8160
fax: (212) 995-4549
e-mail: prehealth@nyu.edu
New York University
College of Arts and Sciences
Preprofessional Advisement Office
100 Washington Square East
Rm. 901 Main Bldg.
New York, NY 10003-6688

Ohio University College of Osteopathic Medicine

Postbaccalaureate Program

Description: Students complete upper level science courses and learning activities as defined in individual learning contracts. Each student will take courses in biochemistry, physiology, anatomy, and/or other biological sciences. Tutoring services and survival skills workshops will be available. Financial aid is available in the form of tuition waivers.

Eligibility: Students must have applied to the Ohio University College of Osteopathic Medicine and have been interviewed, completed a Bachelor's degree with minimum courses requirements for admission, taken the MCAT, and be a citizen or permanent resident of the U.S.

Duration: Eleven months.
Contact: (740) 593-2365
fax: (740) 593-0892
Joni Schaller
Interim Director
Ohio University
College of Osteopathic Medicine
Grosvenor Hall 030
Athens, OH 45701

Pennsylvania State University Postbaccalaureate Premedical Program

Description: Offers a 15-month Postbaccalaureate Premedical Certificate Program at the University Park campus. Program is for academically talented, highly motivated college graduates who do not have a science background but who now wish to

prepare for admission to medical, dental, optometry, podiatry, veterinary, physical therapy or an allied health school. Schedules are flexible — student may enroll as either a full-time or part-time student and attend either regular daytime or evening classes. In-state tuition \$274/credit, out-of-state tuition \$588/credit for Fall 2001.

Eligibility: Students with majors in areas other than a life science; minimum 3.0 GPA; SAT of 1100 or better.

Duration: 15-24 months. Program consists of 38 credits of prerequisite science courses that can be completed in two semesters and two summer sessions or in four semesters.

Deadline: October 15 for Spring semester; April 15 for Summer semester; June 15 for Fall.

Contact: (800) 778-8632 e-mail: mxr22@psu.edu Mildred Rodriguez, PhD, Director Postbaccalaureate Premed Program Pennsylvania State University 213 Whitmore Laboratory University Park, PA 16802-6101

Rutgers, The State University of New Jersey, University College — New Brunswick

Postbaccalaureate Prehealth Program

Description: Preparation for application to medical and other health professional schools in a supportive environment. Program also serves students who wish to improve their GPA. Students have an opportunity to take courses taught by distinguished New Brunswick faculty with undergrad students. Intensive MCAT preparation for April and August exams. Advising, counseling, and health careers workshops.

Eligibility: Bachelor's degree in any field from an accredited institution with a minimum 3.0 GPA. Send application with a \$50.00 fee and transcripts.

Duration: One to two years. **Deadline:** Rolling admissions.

Contact: (908) 932-7234 Dr. Victoria C. Ukachukwu Director of Special Programs Rutgers, State University of New Jersey

University College — New Brunswick 35 College Avenue New Brunswick, NJ 08901

Southern Illinois University Carbondale (SIUC)

Medical/Dental Education Preparatory Program (MEDPREP)

Description: Assistance in admission to and preparing for medical/dental school; MCAT prep; enrichment in biology, chemistry, physics, math, reasoning in reading and writing, study skills; counseling. MEDPREP advisor helps develop academic plan tailored to needs, including university and MEDPREP courses. Course credits; no degree given. Tuition rates as for SIUC; some tuition scholarships. Standard financial aid process (loans). No application fee for program.

Eligibility: 2.0 total GPA, 2.0 math/science GPA; U.S. citizen or permanent resident. All HCOP program participants must be from an educationally or economically disadvantaged background.

Duration: Two years (individualized). **Deadline:** February 1, 2002 for June 2002 entry.

Contact: (618) 536-6671 fax: (618) 453-1919 e-mail: Vfelts@siumed.edu Vera Felts, Admissions Coordinator MEDPREP, School of Medicine Southern Illinois University Carbondale, IL 62901-4323 www.som.siu.edu/medprep

Townson University

Postbaccalaureate Premedical Program

Description: Not remedial. For the outstanding pre-professional who has not submitted an application to medical/dental school or taken the MCAT, DAT. Science courses for admission to U.S. medical, dental schools. Small classes, labs. Flexible curriculum.

Eligibility: Non-science or science major; did not take courses for admission to preprofessional school; accredited bachelor's degree; preparing for admission to professional school; for medical school, minimum undergraduate 3.4 GPA; dental, minimum 3.0 GPA.

Duration: One calendar year (summer, fall and spring academic sessions). Additional semesters are optional.

Deadline: Rolling admissions. Final deadline is March 1, 2002.

Contact: (410) 830-3042
e-mail: fmilio@towson.edu
Frank R. Milio, Professor and Director, Pre-Professional Programs
c/o Department of Biological Sciences
Townson University
Townson, MD 21252-0001

University of Connecticut (UCONN)

At Storrs/School of Medicine Postbaccalaureate Program Description:

have little or no science preparation.

Program B: Designed for students who have completed the college science prerequisites. A separate summer-to-summer Health Career Opportunity

Program is linked to Program B.

Eligibility: Completed baccalaureate degree program from an accredited college or university; admitted students usually have at least a B+/B-average. For retention, must carry minimum 15 credits and maintain at least B+ average each semester.

Program A: Designed for students who

Duration: Program A: Two years. Program B: One year. Health Career Opportunity Program: summer-tosummer.

Deadline: June 15 for Fall; November 1 for Spring; Health Career Opportunity Program: May 1.

Contact: (860) 679-3874 fax: (860) 679-1282 Keat Sanford, PhD, Director Postbaccalaureate Program UCONN Health Center, SOM 263 Farmington Avenue Farmington, CT 06030-1905

University of Miami Coral Gables

Postbaccalaureate Program

Description: Program A: Career Changers. Program B: Completed premedical preparation. No degree given. Graduate and undergraduate courses. Individual advisement. Full facilities and support services.

Eligibility: Bachelor's degree; minimum undergraduate 3.3 GPA in junior, senior years. For retention, maintain 3.5 GPA with minimum 12 credits/semester.

Duration: Program A: One year plus one summer. Program B: One year. **Deadline:** Varies. Rolling admissions.

Contact: (305) 284-5176

Deborah Paris

Director of Premedical Studies and Postbaccalaureate Program. University of Miami, Coral Gables College of Arts and Sciences P.O. Box 248004 Coral Gables, FL 33124

University of North Carolina, Greensboro

Premedical/Predental
Postbaccalaureate Program

Description: Designed for students who did not take the required courses to enter medical or dental school as undergraduates, but who have decided to make a career change. Prepares students to take the MCAT or the DAT. Program is for students with either no science background or just have a few courses to complete.

Duration: 12 months.

Contact: (336) 256-0071 Robert E. Cannon, Chairman Premedical Advisory Committee Department of Biology P.O. Box 26174 UNC Greensboro Greensboro, NC 27402-6174

Wake Forest University School of Medicine

Postbacca laure ate

Development Program

Description: Organic Chemistry I and II, Biochemistry, Human Gross Anatomy, three advanced biology courses. Study Skills and problemsolving workshops. Tuition waived. Student is responsible for own living expenses.

Eligibility: Underrepresented minority/disadvantaged students; accredited undergraduate degree; 2.5 GPA or higher; MCAT mean of seven on verbal reasoning, physical science, and biological science; N on writing sample.

Duration: One year.

Deadline: February 15, 2002 **Contact:** (336) 716-4271 Catrina Goodwin Murphy

Student Services

Office of Minority Affairs
Wake Forest University
School of Medicine
Medical Center Blvd.

Winston-Salem, NC 27157-1037

California Summer Enrichment Programs

San Diego State University Collegiate Union for Health Related Education (CUHRE)

Description: Offers complete program of assistance to help student succeed in entering a professional school in your chosen field. Enrichment instruction in math and all premedical science coursework; student and health professional mentors; peer and professional advising. \$15.00 dues per

semester. Must submit an application; students are evaluated by an Advisory Board of faculty.

Eligibility: Acceptance at SDSU for the following or current semester; demonstrate potential and interest in pursuing a degree in medicine, dentistry, veterinary medicine, or physician assistance; a high school or college science and overall 2.5 GPA or better; U.S. citizen or permanent resident. Contact: (619) 308-4242 Dr. Cynthia Lewis Advisor to CUHRE 10464 Clairemont Mesa Blvd. PMB #171 San Diego State University San Diego, CA 92124

San Jose State University HCOP Summer Enrichment Program

Description: Preparatory courses available for undergraduate students interested in an allied health profession. Meet with community health educators, health administrators, dieticians, occupational therapists, experts in movement science, and recreation therapists. Preparatory courses offered in biostatistics, health promotion, advanced physiology, technical writing, epidemiology, computer training, public speaking, and survival skills.

Eligibility: Must be admitted to San Jose State University for Fall 2002 and

be a sophomore or junior.

Duration: June 17, 2002-July 28,

2002.

Deadline: May 3, 2002 **Contact:** (408) 924-2911

Veronica Giles Program Coordinator San Jose State University College of Applied Sciences and Arts One Washington Square San Jose, CA 95192-0049

Stanford School of Medicine HCOP Summer Enrichment Program

Description: Stanford Health Careers Opportunity Program (HCOP) is an innovative six- week enrichment program that promotes and provides an academic learning environment for talented minority and disadvantaged college sophomores who seek a career in medicine, medical research, and minority health issues. The program offers both research and clinical experiences in addition to MCAT review, mentoring by Stanford medical students, and workshops in medical school admissions. Weekend cultural activities are available. Transportation, housing, and meals are provided.

Additional Features and Benefits:

Weekly clinical shadowing with Stanford physicians, emergency room rotations, personal academic advising, mock medical school interviews, and research presentations.

Enrollment: 25 college sophomores **Duration:** June 23 - August 2, 2002 **Deadline:** March 1, 2002

Contact: (650) 498-4003 fax: (650) 725-5538 Kathryn Fitzgerald Associate Director, HCOP Stanford University School of Medicine Center of Excellence 851 Welch Road, Room 115 Palo Alto, CA 94304-5740

University of California, Los Angeles School of Medicine

Premedical Enrichment Program (PREP)

Description: PREP aims to provide premedical and predental students from disadvantaged backgrounds with a means of strengthening their ability and readiness to study medicine/dentistry.

Two Tier Program:

Tier #1: Scientific problem solving, analytical skills development, small group problem-based learning, clinical preceptorships, research of patient case histories, self-development workshops, networking, counseling, and medical student mentoring. Stipend if 50+ miles. Housing not provided.

Tier #2: MCAT preparation, scientific problem solving, analytical skills development, small group directed study, self-development workshops, counseling, and medical student mentoring. Stipend if 50+ miles. Housing not provided.

Eligibility: Disadvantaged students. Tier # 1: One-year college chemistry or biology. 2.5 GPA minimum. Tier #2: Minimum one year college biology, chemistry, math (pref. calculus), two quarters/one semester of physics, minimum 2.8 GPA in the sciences. Official transcripts; recommendation from science professor and premed advisor/employer; two-page essay on

background, motivation for health career, and what you anticipate accomplishing in PREP.

Duration: Eight weeks; June 26-August 18, 2002. Deadline: March 16, 2002 Contact: (310) 825-3575 Elizabeth Guerrero, MPH Director of UCLA PREP Office of Academic Enrichment

and Outreach 13-154 CHS Box 956990 UCLA School of Medicine Los Angeles, CA 90095-6990

University of California, San Fransisco School of Dentistry

Undergraduate Mentorship Program **Description:** The UMP is designed to enrich the academic backgrounds of undergraduate students from minority and disadvantaged backgrounds who have an interest in pursuing a dental education. Students are enrolled in a series of classes designed to increase their knowledge and familiarity of the Dental Admission Test (DAT). Students also participate in clinical and research laboratory experiences that will give them a better understanding of the dental profession and oral health issues. The program covers the cost of housing and transportation to and from the UCSF campus. Students also receive a small stipend.

Eligibility: Must have completed two years of undergraduate education; completion of biology and general chemistry; transcripts; three letters of recommendation; biographical sketch highlighting past experiences and future goals.

Duration: Seven weeks, from mid-June until the first week of August. **Deadline:** March 1, 2002 (please request an application by January 15,

2002).

Contact: (415) 476-2671 fax: (415) 476-4226 Dr. Charles Alexander Associate Dean of Student Affairs UCSF School of Dentistry 513 Parnassus Avenue, S-630 San Francisco, CA 94143-0430

University of Southern California School of Medicine

HePP — Consortium for Health **Professional Preparation**

Description: Year I: College chemistry, biology, introduction to mathematics or calculus. Year II: Physics, organic chemistry, calculus. Year III: Clinicals, writing, medical ethics, MCAT preparation. Invited speakers discuss disciplines, Q&A sessions. Housing and meals provided. Eligibility: Year 1: Graduation from

high school prior to admission. Must be first-year freshmen student accepted to four-year program. Advancement to Year II upon successful completion of Year I. Continuation contingent upon satisfactory progress.

Duration: Six weeks. **Contact:** (323) 442-1050 e-mail: aalexand@hsc.usc.edu Althea Alexander, Asst. Dean Minority Student Affairs Office of Diversity 1333 San Pablo Street, MCH 51-C

Los Angeles, CA 90033

calculus; basic computer skills, chosen field of study related to health policy or health services research (preferred but not required).

Duration: 10 weeks **Contact:** (617) 432-4422

e-mail:

Jeanett_catherwood@hms.harvard.edu Jeanette Catherwood Project Coordinator Health Policy Summer Program 164 Longwood Avenue, 2nd Floor

Boston, MA 02115

ut-of-State **Summer Enrichment Programs**

Baylor College of Medicine/ Rice University

Honors Premedical Academy **Description:** Participate in clinic/lab, communications course, gross

anatomy.

Eligibility: One year college (qualified postbaccalaureate applicants also eligible); U.S. citizen or permanent resident: 3.0 GPA overall, 2.75 GPA in sciences: SAT of 950 or more, or ACT of 20 or more.

Duration: Six weeks. Deadline: March 1, 2002 Contact: (800) 798-8244 e-mail: mmep@bcm.tmc.edu

Elizabeth Lopez, Program Coordinator Center for Educational Outreach Baylor College of Medicine 1709 Dryden, Suite 534 Houston, TX 77030

East Carolina University

Summer Program for Future Doctors **Description:** Program offers an academic curriculum of medical studies that include cardiovascular sciences, biochemistry, neuroscience, learning skills, and introduction to the medical environment. Exposes students to the style, format, and content of the Medical College Admissions Test (MCAT). Students receive learning opportunities to witness medicine in action, observe procedures, and develop relationships with staff at primary care sites within the community.

Eligibility: Open to disadvantaged,

nontraditional, and minority students who have completed biology, chemistry, and physics. Must be a resident of North Carolina. **Duration:** Eight-week summer session.

Deadline: March 4, 2002 Contact: (919) 816-2500

Academic Support & Counseling Ctr. Brody School of Medicine at East

Carolina University **Brody Medical Sciences** Building 2N64

Greenville, NC 27858-4354

Harvard Medical School

Health Policy Summer Program **Description:** A 10-week mentored summer research experience with senior Harvard faculty in the areas of health service or health policy research, provided at Harvard University and coordinated through the Minority Faculty Development Program (MFDP) of the Harvard Medical School (HMS) Office for Faculty Development and Diversity and the Harvard University PhD Program in Health Policy. Eligibility: Junior or senior baccalaureate student in good standing and attending a MARC-Funded institution; enrolled in a Historically Black College; Hispanic-Serving Institution, or Tribal College; participated in HMS-MDFP-sponsored programs, such as Project Success or Biomedical Science Careers Program; minimum of one college course in

Harvard Medical School

Summer Honors Undergraduate Research Program

Description: Summer Research program. Lab research in variety of topics supplemented with student research discussion seminars and career development series. Housing, travel to program, health insurance, min \$1100/month stipend, and two meals/ week.

Eligibility: U.S. citizen or permanent visa status; entering junior or senior year in college; previous research experience; personal statement of science interest and goals; two letters of recommendation; transcript; one page application form.

Duration: Ten weeks; mid-June to mid-

August.

Deadline: February 1, 2002 Contact: (617) 432-4980 or

(800) 367-9019 #2

e-mail: Shurp@hms.harvard.edu Jocelyn Spragg, PhD, EdM, Faculty Director, Minority

Programs

or Mara Edmondson, Staff Assistant Division of Medical Science Harvard Medical School 260 Longwood Avenue, Rm. 432 Boston, MA 02115

www.hms.harvard.edu/dms/diversity

Marquette University, School of Dentistry/Physical Therapy **Program**

Summer Science Enrichment Program

Description: The Health Careers Opportunity Program (HCOP) offers three summer programs. The Summer Science Enrichment Program I (SSEP I) for high school students interested in the health care career fields: the

Summer Science Enrichment Program II (SSEP II) for college students interested in dentistry and physical therapy; and the Pre-Enrollment Support Program (PESP) for the incoming dental students and graduate physical therapy students. All of these programs offer students courses in dental science, physical therapy, biology, chemistry, ACT/SAT review (SSEP I), and DAT review (for dental SSEP II students) and the opportunity to interact with students and practitioners in dentistry and physical therapy. Housing and transportation to and from Marquette are provided at no cost to the student. **Eligibility:** All students must be financially or educationally disadvan-

taged. *SSEP I:* Must be a rising high school junior or senior with a minimum GPA of 2.75 and have completed two classes of biology and/or chemistry.

SSEP II: All students must be returning to undergraduate school in the fall. Dental: Must be rising undergraduate sophomore, junior, or senior with a minimum GPA of 1 2.5 and have completed two semesters of biology and chemistry.

Physical Therapy: Non-Marquette University students must have a minimum 3.0 GPA and be rising undergraduate seniors with one semester of biology, two semesters of chemistry and physics; two semesters of english and literature (fiction, poetry, etc.); two semesters of history; one semester of psychology, statistics and sociology, or anthropology.

Duration: Seven weeks. **Deadline:** April 4, 2002

Contact: *Dental:* (414) 288-1533 or

(800) 445-5385, ext. 2 e-mail: Multi@Marquette.edu

Office of Multicultural Affairs

Marquette University

School of Dentistry, Rm. 145

P.O. Box 1881

Milwaukee, WI 53201-1881

Physical Therapy: (414) 288-5505 e-mail: Muhcop@Marquette.edu

Physical Therapy Program

Marquette University

Health Careers Opportunity Program Schroeder Complex, Room 349

P.O. Box 1881

Milwaukee, WI 53201-1881

New York University Medical Center

Minority Undergraduate Summer Research Program

Description: Nine week multifaceted program includes clinical and biomedical hands-on research. Participants receive a \$2,500 stipend, round-trip transportation to program, and student dormitory housing.

Eligibility: Competitive, mature, highly motivated, well-qualified undergraduates with a strong interest in medicine or research, that have completed their sophomore or junior year. Applicants must have a strong academic record, and have taken courses in chemistry, biology, and mathematics. Students of diverse backgrounds are encouraged to apply.

Duration: Nine weeks. **Contact:** (212) 263-8949 Margaret Haynes, EdD, MPH Associate Dean

Office of Minority Affairs and Student Services

New York University School of Medicine 550 First Avenue, LH room 4-34-0 New York, NY 10016

Texas A&M University System Health Science Center College of Medicine

Bridge to Medicine Summer Program for Disadvantaged College Students

Description: Intensive study in basic sciences, reading, writing, study skills. Learn test-taking skills for MCAT.

MCAT prep course, diagnostic, full length mock exam. Clinical preceptorships, counseling, mock interviews, learning strategies workshop, medical lectures, and others. Meals, lodging. Provide own transportation. Stipend.

Eligibility: U.S. citizen or permanent resident, 2.8 GPA, at least 60 hours undergraduate coursework, including general biology with lab (eight hours), organic chemistry with lab (eight hours), math (three hours), English (three hours).

Duration: Eight weeks, June/August 2002 Deadline: March 2002

Contact: (979) 862-4065

Thomas Bosquez, Program Director Texas A&M University System Health Science Center Community Relations 1716 Briarcrest Drive Ste. 326 Bryan, TX 77802

Tufts University

Sackler School of Graduate Biomedical Sciences Summer Research Program for Undergraduate Minority Students

Description: Laboratory research in the biomedical sciences, scientific seminars, field trips, a research symposium, and workshops on medical school and graduate school admission. Stipend support, housing, and travel money available.

Eligibility: U.S. citizen or permanent resident that is an underrepresented minority college student interested in biomedical research. Transcript, letters of recommendation, and application form required.

Duration: Ten to twelve weeks. **Deadline:** March 1, 2002 **Contact:** (617) 636-0995

e-mail: cathy.samson@tufts.edu

Cathy Samson

Sackler School of Graduate Biomedical Sciences 136 Harrison Avenue Boston, MA 02111

www.tufts.edu/sackler/summer.html

University of Iowa College of Medicine

Introduction to Medical Education at University of Iowa

Description: Introduction to medical curriculum and provision for personal and career development. Students receive instruction in the basic sciences and exposure to medical school study and test-taking strategies. No tuition is charged for the summer program. A University grant covers living expenses and books.

Eligibility: Open to all students entering the University of Iowa College of Medicine. Limited enrollment

Duration: Eight weeks. **Deadline:** May 1, 2002 **Contact:** (319) 335-7641 Virginia Woodard, Ph.D. Curriculum Coordinator

University of Iowa College of Medicine 124 Medicine Administration Building Iowa City, IA 52242-1101

University of Kansas School of Medicine

Health Careers Pathways Program **Description:** The Health Careers Pathways Program (HCPP) offers three summer programs. The Health Sciences Enrichment Program I (HSEI-I) is for graduating high school seniors or college freshmen interested in medicine: the Health Sciences Enrichment Program II (HSEI-II) is for college students who have completed college chemistry and biology, and interested in medicine; and the Pre-Admissions Program (PAP) offers an MCAT review, shadowing physicians, mock interviews, and admissions to medical school assistance.

Eligibility: open to disadvantaged students.

Duration: Eight-week summer sessions.

Deadline: March 16, 2002 or until all

spaces are filled.

Contact: (913) 588-3088 e-mail: akendrick@kumc.edu Amber Reagan-Kendrick, Associate Director Health Careers Pathways Program **KUMC** 3901 Rainbow Boulevard

3007 Student Center Kansas City, KS 66160-7120

University of Massachusetts Medical School

Summer Enrichment Program (SEP) Description: Daily seminars on health issues; study skills, time management, and test-taking skills. Sessions on MCAT, application process, AMCAS, and financing medical education. Dorm housing required and provided. Stipend.

Eligibility: Underrepresented and economically disadvantaged students, minimum eight hours of organic chemistry and 30 hours college curriculum. Massachusetts state resident, and/or attending a college/ university in Massachusetts at time of application.

Duration: Four weeks — residential.

Deadline: March 1, 2002 Contact: (508) 856-2707 or

(877) 395-3149 #2 fax: (508) 856-6540

e-mail:

isabel.feliciano@umassmed.edu Isabel Feliciano, BA, BS

Program Director University of Massachusetts Medical School

Office of Outreach Programs

55 Lake Ave.,

Worcester, MA 01655

University of Michigan School of Public Health

Summer Enrichment Program in Health Administration

Description: Paid internship (professional health administration position) in southeastern Michigan health care organization. Field visits to health care agencies, lectures, GRE/ GMAT preparation course. Travel expenses; summer housing for students from outside Detroit/Ann Arbor area. Eligibility: Students entering junior, senior college year; interest in health administration, health policy; 2.8 GPA or above.

Duration: Eight weeks. **Deadline:** March 5, 2001 **Contact:** (734) 936-3296 e-mail: UM SEP@umich.edu Carmen Harrison, MA Richard Lichtenstien, PhD Department of Health Management and Policy School of Public Health II

University of Michigan Ann Arbor, MI 48109-2029

University of Pittsburgh School of Medicine

Summer Premedical

Academic Enrichment Program

Description: Level 1: Designed for entering college freshmen or rising sophomores, for strengthening academic skills and building motivation. Program courses enhance learning in science, writing skills, and public speaking. Provide opportunities to interact regularly with doctors and

medical students who have background and educational experience similar to their own.

Level 2: Designed for college junior or senior students who are interested in a medical career. The program gives college students experience in a research and hospital environment and helps students become more competitive candidates for medical school by offering training for standardized tests and interview situations.

Eligibility: Students interested in a medical career. Completed application (call for application), two letters of recommendation, essay indicating reason for seeking the position, and official transcript.

Duration: Seven weeks during June/

July, 2002.

Deadline: March 1, 2002 Contact: (412) 648-8987

e-mail:

minorityaffairs@medschool.pitt.

Paula K. Davis Assistant Dean of Minority Affairs M-247 Scaife Hall University of Pittsburgh School of Medicine Pittsburgh, PA 15261

University of Rochester School of Medicine & Dentistry

Summer Research Fellowship (SURF) Program

Description: Research experiences with a faculty member engaged in ongoing research. Weekly seminars, workshops, and opportunities for observation of clinical activities. Stipend \$250/week. Free university housing for participants.

Eligibility: Completed at least two years of college. All applicants must have academic introduction to their scientific field of interest.

Duration: June/August, 2002. **Contact:** (716) 275-2175

Nathaniel Holmes

Director, Ethnic & Multicultural

Affairs

University of Rochester School of Medicine and Dentistry 601 Elmwood Ave., Box 601 Rochester, NY 14642

HEALTH PATHWAYS

Office of Statewide Health Planning and Development Health Professions Career Opportunity Program 1600 Ninth Street, Room 441 Sacramento, California 95814 (916)654-1730

Periodical



Be sure to include your mailing label with any correspondence regarding your subscription.

Californians Met the Energy Challenge This Summer; Fall and Winter Will Test Our Commitment

Congratulations and thanks to every Californian who contributed to the state's success in meeting the energy challenge this summer! Your commitment to conservation played a major role in preventing rolling blackouts.

This year, the Office of Statewide Health Planning and Development, and other state offices, significantly cut electricity use from January through the end of August compared to the same period in 2000. For example, in monitoring 37 of the state's largest office buildings covering nearly 12 million square feet, the Department of General Services has recorded an average 22.4 percent drop in electricity use. Despite hikes in utility rates, the state was still able to save more than \$800,000 in cities such as Sacramento, Los Angeles, San Francisco, Oakland, San Diego, Van Nuys, and Riverside.

While the state has made extraordinary progress in bringing new power generation on line, the threat of shortages remains real. Conservation, both now and for the long term, will continue to be an important part of the strategy to keep the lights on.

Fall and winter months present challenges just as tough as the summer months. There are increased demands for power across the state for lighting, heating and other priorities. So we cannot let our guard down just because the seasons have changed.

To the right are some practical cool weather tips from the Flex Your Power website that will help all of us continue to save power, save money and keep electricity flowing to all California communities.

Energy saving Tips:

Set your thermostat to 68 degrees when you're home and 55 degrees at night, or off when you're away.



Use Your Appliances Wisely

- --Turn off appliances, lights and equipment when not in use.
- --To help prevent electricity outages, **do not run large appliances** between 5 a.m. 9 a.m. and 4 p.m. 7 p.m.
- --Do your laundry efficiently by using the warm or cold water setting for washing your clothes and always use cold water to rinse clothes.
- --Conserve energy by running your dishwasher only when it is fully loaded, and turn off the dry cycle to allow dishes to air dry instead.

Inexpensive Energy Solutions

- --Choose **Energy Star** ® products. Purchase compact fluorescent light bulbs. They use a quarter of the energy and last five to ten times longer than conventional light bulbs.
- --Reduce your hot water temperature. Set your water heater to the "normal" setting or 120 degrees unless the owner's manual for your dishwasher requires a higher setting.
- --Replace furnace filters once a month. Dirty filters restrict airflow and increase energy use. Keep your furnace clean, lubricated and properly adjusted.
- --Install low-flow showerheads. You'll be surprised how much this simple device can cut your hot water costs.
- --Wrap your hot water tank with jacket insulation. If your water heater is gas, be sure to leave the air intake vent uncovered.

Eliminate Wasted Energy

- -- Turn off lights in unoccupied rooms.
- -- Unplug electronic devices and chargers when they're not in use.
- -- Close the damper on your fireplace when you're not using it.
- --Unplug that spare refrigerator in the garage if you don't really need it.

Check out www.flexyourpower.ca.gov for more information and ways to save money!